Report to the Energy Efficiency Utility Contract Administrator

Verification for Efficiency Vermont Year 2001 Savings and Total Resource Benefit (TRB) Claim

Department of Public Service

May 7, 2002

Summary

On March 1, 2002, Efficiency Vermont (EVT) filed its Annual Report on its calendar year 2001 accomplishments operating as the Statewide Energy Efficiency Utility. As provided for in the contract between Efficiency Vermont and the Vermont Public Service Board, the Department undertook a review of EVT's 2001 activities with the goal of "verifying" the annualized MWh savings and Total Resource Benefit amount claimed by EVT. This report to Mike Wickenden, Contract Administrator for the PSB, summarizes the results of that review.

The DPS recommends that EVT's 2001 annualized MWh savings be reduced by about 644 MWh or 2.0% of the savings claimed in EVT's March 1 report.[1] These adjustments will flow to associated reductions in KW savings and the claimed Total Resource Benefit (TRB) and will be recalculated by EVT.

The DPS and EVT have reached agreement on all but one issue raised in this review. The subject in dispute concerns a snow making equipment project at a southern Vermont ski resort. This report contains a fairly detailed discussion of the DPS findings and reasoning related to its proposed adjustment to the savings EVT claims for this project.

The balance of the subjects raised in the review, and their proposed resolution, are briefly described. The report also includes a description of the DPS review process and a discussion of the role of EVT's Quality Assurance Plan as it relates to DPS evaluation and review responsibilities.

As was the case last year, the DPS commends all EVT staff involved in this process. Their professionalism in sharing their time and knowledge has made this process one that continues to strengthen both parties understanding of the issues confronting Efficiency Vermont and the DPS in our mutual desire to continue advancing the goals of the statewide energy efficiency utility.

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[1] The DPS review results are quantified as reductions to annualized kWh or MWh gross savings at the customer meter. The EVT contract savings goals are expressed in MWh savings at generation, net free ridership and spillover effects. Once the final savings amounts "at the customer meter" are determined, the revised savings "at generation net free ridership and spillover" will be calculated by EVT.

DPS Review Process

Over a two-month period covering March and April, 2002, DPS staff members Tom Franks, Randall Lloyd, Chris Owen, and Carole Welch worked with DPS contractors West Hill Energy and Computing to plan and implement the review, and develop the conclusions and recommendations contained in this report. In addition, the DPS retained the services of engineering consultant, SAID (Science Applications International Corporation) to review seven large or complex projects or technologies for which EVT claimed substantial savings for 2001.

Using EVT's database, West Hill constructed a list of projects proposed for the review. Approximately one hundred thirty (130) projects from a total of 2,155 were selected.[2] Overall, the savings from the reviewed projects represent nearly 12% of EVT's total 2001 claimed annualized MWh savings.

The process for selecting these projects was as follows:

1. All projects were ordered by size (total kWh savings) and approximately the top 25 projects were identified for review.

2. All projects were grouped first by program and then by size, and a few of the largest projects in each program (if not first identified in step 1) were selected.

3. All measures were ranked by size (total kWh savings) and projects with high measure-level savings or unusual measures were chosen (if not already marked in steps 1 and 2 above).

Multiple site visits to EVT offices were made during March and early April to review project files and discuss projects with EVT staff. West Hill used EVT's database to check savings assumptions for prescriptive measures against the reference manual and to verify prescriptive savings for the residential programs. West Hill also developed spreadsheets extracted from the database that contained detailed measure and project data for each EVT program. Electronic and hard copy files from selected projects used by EVT to calculate savings and screen measures were reviewed. Customer billing history records available from EVT's tracking system were reviewed for selected projects.

The DPS provided EVT with a draft list of issues on Friday, April 5. EVT provided its written response to the DPS' preliminary issues the following Friday, April 12 and a meeting

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[2] All EPP lighting and all EPP clothes washers are each considered one project.

between EVT and the DPS was held on April 19. At that meeting, mutually agreed upon resolutions were reached on all but one issue.

Findings

This report and recommendation to the Contract Administrator summarizing the results of the DPS review is presented under one of four categories, as follows:

Category 1: Unresolved Issue with Adjustments
Category 2: Resolved Issues with Adjustments
Category 3: Savings Issues Without Adjustments, Requiring Future Attention
Category 4: Other Issues

In general, items in all categories will require further action. Most, if not all, of the issues identified and discussed under categories 1, 2, & 3 will be referred to the appropriate Technical Advisory Group (TAG). In some instances, the review uncovered items where EVT apparently under reported savings and/or TRB. This report makes no effort to quantify those items. The report also includes some process issues and concerns identified during the review that will require EVT attention and perhaps further discussion/negotiation. Finally, this report contains a brief discussion of a role EVT's Quality Assurance Plan implementation might play in the DPS review and evaluation of EVT programs.

Category 1: Unresolved Issue

The DPS and EVT have not reached agreement on the appropriate savings to claim for a snow making project at Stratton Mountain Resort. EVT asserts the measure installed is a retrofit project, not subject to an Act 250 permit, and therefore not subject to an agreed-upon adjustment factor of 75% for Act 250 major projects. The DPS asserts EVT knew, or should have known, the ski resort has an Act 250 Master Plan with efficiency provisions and thus efficiency measures implemented at that resort are subject to the "major project" adjustment factor.

The parties agree that this project and others identified elsewhere in this report illustrate the need to clarify whether projects are under a master plan or otherwise qualify as a major project in Act 250.

CEO Program: Act 250 Master Plan project

Stratton Mountain Resort (Project 6014-1318)

This Stratton Mountain project involved installation of efficient "tower" guns as part of snow making equipment on existing trails. The annual savings estimate was calculated based on guidelines established a year ago in consultation with SAID. There is no dispute about this estimate. The dispute concerns the status of the project as a "major project" under Act 250 jurisdiction, which subjects the estimated savings to the agreed-upon 75% Act 250 Impact Factor.

In its preliminary findings document, the DPS noted that three snow making projects it reviewed, including this project, were recorded in EVT's tracking system in the CEONEW track rather than as Act 250 "major" projects. In its response, EVT stated the projects had been erroneously recorded, were replacements or additions to existing equipment, and should be recorded as a MOP project but not as Act 250 projects. EVT's staff did not understand an Act 250 permit modification was required for this work or that existing permits governed the work and was unaware of Act 250 requirements that apply to existing equipment.

The Stratton Mountain Resort is a frequent Act 250 applicant and published an Energy Master Plan in September 2000 that provides a road map to guide energy efficiency investments at the resort. Because a resort frequently adds or upgrades energy equipment in projects both within and outside the scope of individual Act 250 construction permits, the Department seeks master plan guidelines be followed for resort-related work – whether subject to individual construction permit amendments or not. This is consistent with the DPS's policy on "Ski Area Master Planning and Act 250" published in January 1995 and the Department's "Draft Master Plan and Land Use Plan Application" of February 2000 (attached) requiring an energy efficiency implementation plan for retrofits and other non-Act 250 work in existing facilities to offset new electric load resulting from permitted new construction projects. In addition, the resort is located on the constrained Southern Loop transmission and distribution system and thus electrical end use efficiency is a topic of ongoing discussions between it, the DPS, and Central Vermont Public Service Corporation.

The DPS and EVT agree that the issue of coordination with the DPS Act 250 regulatory activities needs further attention and clarification and both parties have committed to seek improvements in communication.

The Department has constructed a history with documentation (attached) that supports this position, as described below.

In 1998, Stratton made available for review a general master plan for the resort's development. Randall Lloyd of DPS and Jon Groveman, land use attorney for the Agency of Natural Resources, offered comments to the District 2 Environmental Commission which led to a

filing by the resort of a document titled "Energy Assessment Plan" on August 31, 2000. This document described existing and planned energy systems at Stratton and fulfilled the resort's obligation for the energy Criterion 9(F) component of its master plan. (See attached: memo by Randall Lloyd of May 26, 1998, "Stratton Master Plan"; Agency of Natural Resources Entry of Appearance by Jon Groveman, May 21, 1999; and excerpts from the Stratton Mountain Resort Energy Assessment Plan, Aug. 31, 2000, sent to District 2 Environmental Coordinator April Hensel). The Department recollects providing a copy of the Stratton energy master plan to Efficiency Vermont staff.

The Stratton energy plan gives a year-by-year count of HKD "tower" guns planned for installation through year 2009 (see pages 10, 16 and 18) to "improve the efficiency of the snowmaking further..." The pledge to install these measures was formalized as a result of the Department's insistence that the resort develop an energy master plan. The resort also said it would follow Act 250 energy criterion "in any new installations." (See Stratton Energy Assessment, page 10).

On October 25, 2000, EVT distributed a memo entitled "C&I Act 250 Baselines and Inspections." The memo on page two stated: "Major projects are defined as any building that is over 30,000 square feet **or** is part of a project with an Act 250 Master plan designation." The memo also describes the methodology whereby "major" Act 250 projects are subject to the agreed upon 75% impact factor adjustment.

In summary, the DPS recommends the Contract Administrator support the DPS adjustment given the documented history demonstrating that:

1. Stratton Mountain Resort has an energy master plan;
2. Efficiency Vermont was aware, or should have been aware, of the Stratton master plan; and
3. The .75 impact factor applies to electric consumers with Act 250 master plans.

DPS Recommendation: The annualized MWh savings claimed by EVT for this project should be reduced by applying the .75 Impact Factor for "major" Act 250 projects as outlined in the October 25, 2000 memo. This reduces the claimed annualized kWh savings from 592,060 to 444,045, for a reduction of 148,015 kWh.

Category 2: Resolved Issues with Adjustments

EVT and the DPS have reached agreements on specific adjustments for the following measures. These adjustments are reflected in the attached chart.

CEO Program

Project No. 6014 1108. Shelburne Community School Expansion. This Act 250 project specified propane heat in its application and agreed in writing to a ban on electric space heat. During a review of the project, Efficiency Vermont staff learned the project might install used, modular classrooms with electric heat, despite earlier assertions. DPS wrote the district environmental commission July 20, 2000 and received an assurance electric space heat would be banned. Hence, the original heating plan was adhered to. It's arguable whether the electric heat would have been installed, but it's clear EVT had a role in eliminating any prospect of it.

The DPS and EVT agree to a compromise of 50 percent of the gross estimated savings. This reduces EVT's claimed savings by 55,930 kWh's.

Project No. 6013 1332. Verizon. In its preliminary findings, the DPS questioned EVT using the higher of two savings calculations found in the file for this project. EVT's response clarified that the higher savings estimate was the result of a detailed analysis done by Hallam Engineering . The DPS accepts the use of the more rigorous analysis, and hence, supports the original claim by EVT.

Project No. 6013 1693. Holiday Inn pool dehumidification. This measure was one of several where DPS requested an analysis by SAID regarding the savings claim. In this case, SAID concluded that the measure, while worthwhile, used an unrealistically high number for baseline energy consumption. The SAID analysis supports a savings claim of 66,546 kWh rather than the 125,783 kWh's claimed by EVT, which results in a reduction of 59,237 kWh.

EVT has agreed to this adjustment.

Project No. 6014 1053. Northeast Cooperatives. This was the phase two expansion of the Northeast Cooperatives freezer warehouse space permitted by the Act 250 commission. There was an implicit understand among the DPS, CVPS (which negotiated a phase 1 incentive) and the permittee that two-stage lighting would be installed in phase two if experience with it was favorable in the first warehouse section. CVPS incentivized bi-level warehouse switching as an above-baseline measure during the cooperatives' phase 1 construction. As a result, DPS contends the permit process largely succeeded in securing the energy savings from this measure in Phase two, through establishing a higher custom baseline for subsequent phases of the project. Nevertheless, EVT presence in this project likely influenced the actual installation of this agreed-upon measure.

EVT and DPS agreed this project was unique in certain respects, particularly as a "transition" from DSM services by CVPS to EVT. A compromise was reached whereby EVT will claim 50 percent of the adjusted savings. This is a reduction of 44,973 kWh.

Project No. 6014 1078. Bishop Marshall High School. In a May 2000 project review letter, EVT discovered there was a planned 9 kW booster heater for a kitchen dishwasher. DPS discussed the matter with the applicant, who agreed to a non-electric alternative. DPS recommends that the savings claim be "shared" because it was able to negotiate the alternative (in effect, a custom baseline) as part of the permit process.

In a compromise, EVT agreed to accept the DPS recommended 50% adjustment.

Project No. 6014-1192 Smugglers Notch Snowmaking. Smugglers Notch and the DPS have worked closely on a number of energy fronts over the years including Act 250 master planning. In general terms, Smuggler's adheres to minimum energy performance levels that are higher, on average, than that typically found for small projects around in the state. This is true, of course, for Smuggler's new construction projects subject to Act 250.

This snowmaking expansion is a "major " Act 250 project and as such, the current practice baseline should reflect a custom baseline based on a reasonable assessment of Act 250 permit conditions resulting from the customer's originally intended design.

Therefore, the project savings should be reduced by applying the .75 Impact Factor for "major" Act 250 projects. This reduces EVT's claimed savings by 39,839 kWh.

EVT agrees with this adjustment.

Project No. 6014-1320 Jay Peak Tower Guns. The Department recommended that this project also be recognized as Act 250 "major" project and therefore the savings should be determined using .75 Impact Factor adjustment. EVT questions how it would have known this project was subject to Act 250. The DPS acknowledges Jay Peak and the District 7 Environmental Commission are not as far along in the master planning process as most other Vermont major ski resorts.

In compromise, the DPS and EVT agreed to reduce the booked savings by 12.5 percent.

Act 250 "Major" Projects. Following a review of seven projects identified by DPS, EVT determined that the "impact factor" was applied incorrectly to custom measures for four of these "major" projects. This error was associated with the phasing in of the "CAT tool" software. The DPS provided EVT with a preliminary estimate of the adjustment by applying the .75 Impact Factor for the custom measures in these four projects.

EVT will verify the DPS estimate for these four projects.

Efficient Products Program: Clothes Washers

For 545 of the 2,715 clothes washers installed through this program, EVT incorrectly claimed savings of 347 kWh per year instead of the 312 kWh as documented in the TRM. EVT has agreed to correct this error.

Efficient Products Program: Free bulbs

Due to delays in the mail order catalog product deliveries, Energy Federation Inc. (EFI) distributed free CFL bulbs to appease its customers. EVT claimed full savings for the 136 bulbs shipped on or around February 2001. Since the customer did not actually order these bulbs, the DPS has concluded that it is unduly optimistic to claim savings comparable to purchased bulbs. In response to DPS inquiries about this, EVT relayed EFI's belief that, because these bulbs were sent to"users", i.e., people who have demonstrated their interest in using efficient lighting products by ordering them directly, they have a higher chance of being used in high use locations and therefore the savings should not be discounted.

The DPS and EVT compromised and agreed that the savings for the free bulbs will be reduced by 25%.

Low Income Single Family Program: Weather Normalization for Space Heat Fuel Switching

EVT increased the kWh savings estimated from the billing history by 10% to account for weather normalization. This adjustment is based on calculating the average degree days for the previous three heating seasons and comparing this average to the 20-year average. In all the files reviewed by the Department, the billing history reflected usage during the 2000/2001 heating season. However, the heating degree days for 2000/2001 were about 5% lower than the 20 year average. Since the 2000/2001 usage should be normalized to the actual heating degree days for that period, the correct adjustment should be 5%, not 10%.

EVT has agreed to reduce kWh, KW and TRB savings from the space heating fuel switches in this program by 5% across the board.

Low Income Single Family Program: Double Counting of Fuel Switch and Conservation Savings

For seventeen projects in this program, savings were claimed for both hot water conservation and water heat fuel switching measures installed during 2001. About 6.5 MWh's were claimed for conservation measures installed in homes that also switched fuels. Although the Department agrees with EVT's approach of installing the water conservation devices at the time of the audit even if the customer later decides to switch fuels, the savings should be claimed only once.

EVT agreed to remove the savings associated with the conservation measures for those participants who switched fuels.

Low Income Single Family Program: DHW Fuel Switching

The DPS reviewed sixteen projects with completed DHW fuel switches, and ten of these installations were projected to save more than 6,000 kWh. The technical analysis for eight of these ten projects contained anomalies of various kinds. For example, three of these participants were on CVPS's rate 3.[3] In these cases, the rate 3 bills reflected the exact amount of electricity consumed for water heating, but the fuel switching savings claimed for all three projects were substantially higher than the rate 3 usage. Review of the analysis tool for the other projects showed possible errors in inputs and highly optimistic estimations of water usage. After identifying these issues, the DPS also compared the estimated savings against the actual reduction in usage as a reality check. For two of these projects, there was sufficient post-installation billing history to suggest that the fuel switching savings were substantially overestimated.

EVT agreed to reduce the kWh, KW and TRB savings for these eight projects as shown on the attached spreadsheet. In addition, the DPS determined that the adjustments for the ten reviewed projects with high savings added up to approximately 20% of the total savings for these ten projects. EVT agreed to reduce the fuel switching savings for the remaining 25 DHW fuel switching projects with high savings by 20%.

Low Income Single Family Program: Space Heat Fuel Switching Project

For project number 6034 2277, the savings are substantially overstated in the Fast Track snapshot compared to the heat load calculation subsequently provided by EVT (34,149 gross kWh compared to 17,920 kWh pre-weatherization and 10,003 kWh post-weatherization).

The DPS and EVT have agreed that the estimated post-weatherization savings of 10,003 annual kWh and associated KW savings should be claimed for this project.

Residential New Construction Program: Lighting

Per unit savings for specific fixtures, i.e., T-8's (average 520 kWh per year), metal halides (1,679 kWh) and U-tubes (400 kWh), are overstated due to the assumption that these fixtures

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[3] CVPS Rate 03 is a residential off-peak water heating tariff. These water heaters are separately metered, thus providing actual electric water heating usage for these customers.

are replacing flood lights. This assumption may be reasonable on a straight lumen-equivalency basis, but it does not reflect actual lighting decisions made by builders and homeowners.

In a compromise, the DPS and EVT agreed EVT will reduce the savings to the average per unit savings shown on the attached spreadsheet.

REEP: **Ventilation Fans.**

Forty-two ventilation fans were installed in the Westgate complex through REEP. These fans are expected to run continuously. The claimed measure life of 10 years, however, would be appropriate only if the fans were expected to be operated eight hours per day. At the rated lifetime, about 3.5 years would be a more realistic assumption for continuous operation.

EVT and the DPS have agreed to reduce the measure life to 3.5 years, and adjust associated lifetime and TRB savings.

Category 3: Savings Issues Without Adjustments, Requiring Future Attention

The issues listed under this category were identified during the verification process, but did not rise to the level of requiring adjustments to the year 2001 savings and TRB claim. In general, these issues will be addressed through the process for reviewing the technical reference manual and will be referred to the Technical Advisory Group for consideration.

CEO Program

Act 250 Projects. DPS acknowledges the program design changes related to the ACT 250 track of the CEO program instituted in late 2001. The addition, EVT provided the Department with revised Act 250 Baselines in its Portfolio of New and Revised Measures of April 1, 2002. The DPS proposes that a revised methodology for calculating savings for all Act 250 projects in 2002 be established by the parties by July1, 2002.

Measures with high operation and maintenance (O&M) requirements. The Department has often encouraged EVT to consider establishing a mechanism to adjust estimated savings for O&M intensive measures by applying a persistence factor, or other appropriate adjustment, for high O&M measures which do not incorporate O&M follow-up or commissioning services. The DPS recommended that EVT establish appropriate adjustments to its reported measure savings for high O&M measures such as programable lighting, energy management and other

automated energy optimization and variable load systems to account for energy savings realization rates which are likely to be lower than engineering estimates. DPS proposes that EVT include appropriate persistence factors (e.g., .85 or .9) to its savings calculation methodology for high O&M measures in the Technical Resource Manual (or include a CXC variable to measure algorithms similar to that established for VFD measure # I-A-2-a).

Interactive Savings. In reviewing the project files for 2001 projects the DPS was unable to find a clear and consistent description or documentation of the methodology applied to individual measure savings to account for interactive effects among groups of measures (e.g., lighting equipment and controls, HVAC equipment efficiency and economizers and/or ventilation controls and comprehensive packages of motor drive, HVAC efficiency and refrigeration measures).

EVT agreed to document calculation methodologies to address interactive savings for projects involving multiple measures.

Tower Shoemaking Guns. These have become a prevalent purchase for shoemaking at major ski resorts in recent years, suggesting the market is changing rapidly. Suitable incentive levels for this measure and a more critical analysis of savings claims deserves timely attention. Efficiency Vermont staff believes resorts likely have electric and water metering data that will be useful in more accurately ascribing energy and demand savings attributable to tower guns.

Investment Payback less than One Year. DPS noted many CEO projects where the customer's investment on payback was less than one year. EVT agrees to discuss this issue further with the DPS and explore program refinements to ensure that quick payback measures leverage more comprehensive measure installations.

Dairy Farm Program: Water Savings

EVT agreed to investigate developing a method to claim water savings for dairy farm measures that save water.

Low Income Single Family: Space Heating Normalization

EVT is currently normalizing the space heating usage to a 20-year average. Given the recent warming trend, EVT should consider normalizing to a 10 year rather than a 20 year average.

Efficient Products Program: Lighting Savings

The DPS review and analysis of the lighting savings claimed in this program raises questions about the appropriateness of some of the assumptions underlying the savings for lighting products in this program. A minor specific adjustment was agreed on for the "free bulbs" issue identified under Category 2 of this report. The following discusses the other issues identified in our review we propose to subject to an adjustment moving forward.

Multiple purchases. A significant percent of the 2001 program lighting savings are tied to participants who purchased multiple lighting products. Program guidelines allow participants to receive rebates for a total of 6 bulbs and 4 fixtures annually. Over 22% of 2001 program savings are connected to participants purchasing over 10 lighting products. Sixty participants purchased over 20 products. These purchases translate to unrealistically high annual savings per account. Each unit purchased in this program is credited with a per unit savings based on an average annual burn time of 3.4 hours per day. However, the high per participant number of products purchased suggests some of these products will not likely be installed in high use locations. The lifetime savings may eventually be realized, but annual savings are likely overstated in these situations.

EVT responds that many of the accounts with the largest savings are apartments, or owners of rental units making purchases under one accounts for multiple accounts. In interviews, EVT staff reported it investigated this issue during the year by calling the stores where the large purchases were made, and that generally the store was able to explain the transaction to EVT's satisfaction. In these cases, the high volume purchases were to be installed in many separate dwelling units.

EVT's response may address the participants in the very high savings group, roughly the 80 participants expected to save more that 2,000 annualized kWh. However, another 1,600 accounts (18% of the total products sold) show estimated savings between 750 and 2,000 kWh per year. This represents savings ranging from 75% to 200% of the average annual residential lighting use estimate of 1,000 kWh per year. These numbers reflect 2001 only. With participants able to purchase 10 lighting products each year, there is potential for this situation to become more prevalent.

From a program implementation perspective, EVT's policy is appropriate. The DPS's concern is that the basis for the savings, spillover and free rider assumptions are unlikely to apply to the participants purchasing high numbers of efficient lighting products. These assumptions should be reconsidered and adjustments made to better fit the effect of program implementation strategies.

Seasonal participants

Over 15% of Vermont housing is classified as seasonal so it is likely some of the EP purchasers are seasonal residents.[4] These participants are unlikely to use the lighting products (or clothes washers) to the same extent as assumed in the measure characterizations. This issue may also support some revision to the savings assumptions.

REEP

Water Conservation Savings. REEP is calculating the savings from water conservation savings using estimated amount of water used and changes from the conservation devices. In the past, this method has generally produced higher results than could be verified through monitoring studies. REEP has argued that water savings in MFB's are likely to be higher than in single family due to the greater complexity of the water distribution systems in MFB's. Most of the water heating savings are associated with fossil fuels and the TRB. One project has electric savings of about 4 MWh for 3 showerheads and 3 kitchen aerators (1,335 kWh per unit, 500 per aerator and 835 per showerhead). The prescriptive savings in the LISF are 57 kWh per aerator and 340 per showerhead. The same calculations are made for buildings with fossil fuel water heating. REEP's savings seem to be high, even if distribution system savings are added.

The DPS suggests that EVT should either document that these savings can actually be achieved in these buildings or adjust the savings calculations to be more conservative.

Low Income Single Family Program

During the course of its review, the Department noted that the validity of the results of the water heating load estimated from the disaggregation tool seem to be highly dependent on the individual using the tool. The Department suggests that high fuel switching savings for both water and space heating should be more thoroughly reviewed by EVT, and that alternatives to the "disagg" tool for estimating water heating load should be considered for future program implementation of the LISF and other residential fuel switching programs.

Residential New Construction Program: Lighting

The DPS and EVT should revisit the assumptions for calculating the savings for some fixtures. EVT is currently in the process of modifying the number of lighting measures and

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[4] We are unable to assess the magnitude of the purchases by seasonal customers. EVT suggested that it may be possible to identify seasonal participants by comparing the utility mailing address to the site address. This would have to be done by EVT and it is not altogether clear it would be worthwhile at this time.

reviewing the assumptions used in this program. When this process is complete, the DPS will review the results.

Category 4: Other Issues to be Addressed on a Prospective Basis

Some of the issues raised relate more to program implementation processes rather than simply savings calculations. EVT and the DPS have agreed to establish an approach to discuss and resolve these issues.

Low Income Single Family Program: Space Heat Fuel Switching Savings

EVT should look at the procedures for screening space heating fuel switches in this program. The screening should be conducted as a package containing the fuel switching and weatherization measures, with the goal of recommending the set of measures with the highest net benefits. If the package passes the screening, each measure should be considered to be cost effective. If the weatherization measures will be installed but are not funded by EVT's program, both the program kWh savings and estimated increase in fossil fuel usage should be based on post-weatherization savings.

CEO Program: Productivity Issues

In last year's report to the Contract Administrator, the Department identified this issue. We reiterate our interest in having EVT provide input to the DPS to characterize productivity changes made in conjunction with industrial and large commercial efficiency projects. This might involve documenting additional tangible benefits that are not currently addressed or quantified in the TRB calculation methodology such as improved power factor, reduced customer bills due to ratchet clauses, reduced on-site emissions and production waste, improvements in productivity and working conditions, reduced utility bill arrearage, local economic development "multiplier effects", local job creation, and other items EVT encounters in its program implementation. Related to this effort, the parties should consider how offsets could be estimated for projects which are likely to result in additional electrical consumption due to increased manufacturing output .

Role of EVT Quality Assurance Plan

At the beginning of this review, the DPS relayed its desire to review certain products of EVT's Quality Assurance Plan. EVT indicated there are not specific files or documents available that constitute these items specified in EVT's Quality Assurance Plan. As a result, this review does not incorporate any information related to EVT's quality assurance activities other

than that information contained in the project specific files reviewed. Where potential issues have arisen that might be illuminated by the QA documentation, we were limited to anecdotal information provided by EVT staff interviews.

Components of EVT's Quality Assurance Plan could be very useful to the DPS evaluation of EVT's programs, particularly its processes and procedures. It is therefore a cause for concern to learn there is not information available from the QA process.

We recognize the situation presents a dilemma in that the value of QA to EVT can be compromised when regulators have access to files whose value lies partly in its ability to be direct and candid without the constraint of potential regulatory disapproval. We do not want to create a situation whereby the primary focus of QA becomes the development of products for the regulator's eyes rather than the improvement and enhancement of EVT programs and services.

However, there are certain aspects of EVT's plan we think are important to the DPS's evaluation work and, we believe, our activities related to the review of your Annual Report. We would like to meet soon with EVT and the Contract Administrator to discuss and resolve this issue so that EVT's QA Plan can fulfill its expected role in informing DPS evaluation activities.